

Claims

1. A process for preparing methyl N-butyryl-4-amino-3-methylbenzoate, characterized in that o-toluidine is reacted with butyryl chloride to give  
5 N-butyryl-2-methylaniline, the latter is brominated to give N-(4-bromo-2-methylphenyl)butanamide and this is converted by reaction with carbon monoxide and methanol in the presence of a palladium catalyst to give methyl N-butyryl-4-amino-3-methylbenzoate.
- 10 2. The process as claimed in claim 1, characterized in that the first stage is carried out by initially charging o-toluidine in an inert solvent and then metering in butyryl chloride at temperatures of from 50 to 100°C.
- 15 3. The process as claimed in claims 1 and 2, characterized in that the second stage is carried out by initially charging N-butyryl-2-methylaniline in acetic acid, adding from 1 to 1.3 molar quantity of elemental bromine together with further acetic acid at from 10 to 80°C, continuing to stir the mixture at from 10 to 80°C for from 20 minutes to 3 hours, then adding a water quantity of from 0.5 to 5 times the volume, removing the precipitate formed, washing it  
20 with water and drying it under reduced pressure.
- 25 4. The process as claimed in claims 1 to 3, characterized in that the third step of the process according to the invention is carried out by initially charging N-(4-bromo-2-methylphenyl)butanamide and a palladium catalyst into a pressure vessel, then adding a mixture of methanol, optionally one or more solvents other than methanol and a base, then pressurizing at from 90 to 160°C to 2-30 bar of carbon monoxide and maintaining this pressure until no more carbon monoxide is taken up.

5. The process as claimed in claims 1 to 4, characterized in that the palladium catalysts used are those of the  $Pd(PPh_3)_2X_2$  type where  $Ph$  = optionally substituted phenyl and  $X$  = halogen.
- 10 6. The process as claimed in claims 1 to 5, characterized in that a base is added in the third stage.
- 15 7. A process for preparing N-(4-bromo-2-methylphenyl)butanamide, characterized in that o-toluidine is initially charged in an inert organic solvent, butyryl chloride is then metered in at temperatures of from 50 to 100°C, the solvent is removed by adding water to the melt of the amide obtained and distilling it off again, admixing the crude amide thus obtained with a solvent suitable for bromination and adding from 0.45 to 0.95 of bromine per mole of the amide at temperatures of from 10 to 130°C and, to supplement to 1 mol, an oxidant.
- 20 8. A process for preparing N-(4-bromo-2-methylphenyl)butanamide, characterized in that butyryl chloride is metered in to o-toluidine at from 50 to 100°C, the solvent is removed distillatively, and water is optionally added to the melt of the amide obtained and distilled off again.
- 25 9. The process as claimed in claim 7, characterized in that the bromination is carried out by simultaneously metering in the bromine and the oxidant on the one hand and the amide on the other hand with a tolerance of up to 20% in the respective volume flow rates.

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10. N-(4-Bromo-2-methylphenyl)butanamide of the formula

